

Title (en)  
VERTICAL RADIO FREQUENCY MODULE

Title (de)  
VERTIKALES FUNKFREQUENZMODUL

Title (fr)  
MODULE RADIOFRÉQUENCE VERTICAL

Publication  
**EP 3231268 A1 20171018 (EN)**

Application  
**EP 15784522 A 20151007**

Priority  
• US 201414565744 A 20141210  
• US 2015054400 W 20151007

Abstract (en)  
[origin: WO2016093933A1] A radio frequency (RF) module having a plurality of channels includes a heat sink having at least one tapered edge; a substrate disposed over a surface of the heat sink such that the tapered edge of the heat sink extends past a boundary of the substrate. RF, logic and power circuitry is disposed on the substrate and one or more RF signal ports are formed on an edge of the substrate to allow the RF module to be used in an array antenna having a brick architecture. The tapered edge heat sink provides both a ground plane for RF signal components and a thermal path for heat generating circuits disposed in the substrate.

IPC 8 full level  
**H01Q 21/00** (2006.01); **H05K 7/20** (2006.01)

CPC (source: EP IL KR US)  
**H01Q 21/0025** (2013.01 - EP IL KR US); **H01R 12/72** (2013.01 - IL KR US); **H05K 1/0204** (2013.01 - IL KR US);  
**H05K 1/0237** (2013.01 - IL KR US); **H05K 1/111** (2013.01 - IL KR US); **H05K 1/183** (2013.01 - IL KR US); **H05K 7/20509** (2013.01 - EP IL KR US);  
**H05K 2201/06** (2013.01 - IL KR US); **H05K 2201/09036** (2013.01 - IL KR US); **H05K 2201/10098** (2013.01 - IL KR US)

Citation (search report)  
See references of WO 2016093933A1

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)  
BA ME

DOCDB simple family (publication)  
**WO 2016093933 A1 20160616**; CA 2961904 A1 20160616; CA 2961904 C 20230314; EP 3231268 A1 20171018; IL 252175 A0 20170731;  
IL 252175 B 20210729; JP 2018506870 A 20180308; JP 6419970 B2 20181107; KR 101972241 B1 20190424; KR 20170052646 A 20170512;  
US 2016174357 A1 20160616; US 9402301 B2 20160726

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**US 2015054400 W 20151007**; CA 2961904 A 20151007; EP 15784522 A 20151007; IL 25217517 A 20170509; JP 2017528922 A 20151007;  
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